THE COST EFFECTIVENESS OF AGRICULTURAL EXPORT CREDIT

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The Agriculture and Food Act of 1981 contains authority for a revolving fund to finance agricultural exports. This provision, however, has not been funded because of budget constraints. With farm prices at low levels, several farm groups have suggested that monies for the export credit revolving fund be made available. This paper provides the CBO's assessment of this suggestion to include the implications for: farm prices and cash receipts; agricultural trade, to include exports and employment; and budget outlays, to include the effects on price support programs.

BACKGROUND

Since 1956 the federal government has used credit to stimulate commercial exports of agricultural commodities, mainly grains, soybeans, and cotton. Prior to fiscal year 1981, the Commodity Credit Corporation (CCC)—under its permanent charter authority—made direct, short-term export credit loans. Under this program, a U.S. exporter would sell agricultural commodities to an importer on a deferred payment basis for periods up to 36 months. In turn, the CCC purchased the exporter's account receivable—covered by irrevocable letters of credit issued by U.S. or foreign banks. The CCC had discretion in determining the interest rate. In the early years of the program, the interest rate charged borrowers was usually greater than CCC's cost of borrowing from the Treasury; later, the interest rate was set 0.5 to 1.5 percentage points above the U.S prime rate.

The annual budget impact of the pre-1981 direct export credit program varied from net outlays to net receipts depending on the precise volume of new loans, the amount of principal repayments, and the difference between interest receipts from borrowers and interest payments to the Treasury. Payments due from some countries, including Poland, have been rescheduled, and there was one instance of default. Over time, however, the short-term export credit program has probably resulted in no net outlays other than administative expenses. Nevertheless, direct loans were replaced by loan guarantees in fiscal year 1981, in part because of the potential annual net outlays associated with direct loans.

Under the current export credit program, the CCC guarantees that U.S. exporters or their assignees (U.S. financial institutions) will receive payment in the event of nonpayment by a purchaser's bank. The CCC guarantees 98 percent of the borrowed principal and up to 8 percent interest

charged by the bank. Loan guarantees in 1982 and 1983 are projected at $2.5 billion each year, about 5 percent of the total value of U.S. agricultural exports.

EXPORT ADDITIONALITY

A central issue in any export credit program is additionality—the ability to add to total agricultural exports rather than simply displace commercial transactions. Federal loan guarantees or direct loans are used on the premise that easier access to credit would stimulate agricultural exports, and that U.S. exporters or financial institutions would not finance some exports without such guarantees. In the absence of federal credit extension, it is presumed that a country would either not buy a specific commodity or would buy less from the United States and more from a competing supplier offering more favorable terms.

Unfortunately, this presumption cannot be tested in any sytematic way. Agricultural exports are subject to so many influences that the impact of export credits cannot usually be isolated from the other factors. And, even where past additionality may be demonstrated in a particular situation, such evidence usually cannot be extrapolated into the future with confidence. Most analysts hold that export credits of $100 million result in much smaller amounts of additional exports; based on available evidence, 1/ the CBO concludes that on average, additionality ranges from $20 million to $30 million per $100 million in credits.

Export credits appear to be most effective in increasing exports where countries cannot buy without credit and have a potential long-term demand for U.S. agricultural products. They are likely to be less effective as a competitive tool to maintain the market share of U.S. commodities.

Grains, soybeans, and upland cotton tend to be undifferentiated by country of origin, and U.S. prices generally set world prices. However, the United States is viewed as a residual supplier of those commodities. This is because competitors, who also use export credits as well as other agricultural subsidies, can often undercut U.S. prices, sell their available supplies, and leave the residual market to the United States. Thus, competitors might substantially negate any effect that U.S. export credits would have in existing markets. Even if export credits increased U.S. exports in a particular country at the expense of a foreign competitor, the competition might be intensified elsewhere. Ultimately, these competitive subsidies might only result in reallocating supplies within existing markets.

1/ Including unpublished Department of Agriculture analyses.

Thus, additionality emerges not only as a key factor in the effectiveness of any export credit proposal, but also as the most difficult factor to estimate.

AGRICULTURAL EXPORT CREDIT REVOLVING FUND

The Agriculture and Food Act of 1981 (Section 1201) authorizes a Agricultural Export Credit Revolving Fund (AECRF) through fiscal year 1985, to enable the CCC to extend credit directly to importers for the purchase of U.S. agricultural commodities. Funds are to be appropriated as necessary, and all principal and interest repayments are to be added to the AECRF. Most (85 percent) of the export credits extended in any fiscal year would be for commercial export sales on credit terms of up to three years.

The AECRF would be similar to the CCC's former direct short-term export credit program; but under the former program, borrowing authority, rather than direct appropriation, was used to make the direct loans. The principal difference in the 1981 legislation is the addition of the revolving fund. Beyond this, the CCC does not need new legislation to make direct export credit loans. Rather it could draw upon its borrowing authority to make such loans as authorized in its founding legislation.

It is unclear whether direct loans would be much more effective than loan guarantees in stimulating additional exports. The most likely advantage is that direct loans let the federal government set a lower interest rate than would be obtained in commercial transactions. This allows U.S. farm exports to compete with a borrower's alternative credit sources. For example, the CCC's cost of borrowing from the Treasury is now at least one percentage point below the rate a borrower would have to pay in the Eurodollar market. In addition, some purchasers, principally government agencies, may prefer government-to-government transactions over loan guarantees made in private credit markets.

All this suggests that direct loans might indeed stimulate more exports than loan guarantees, particularly where the federal government is willing to lend at a lower interest rate than private lenders who incorporate risk premiums and profits in their rates. In such cases, however, foreign borrowers receive interest subsidies. These subsidies can have two effects. To the extent they add to the federal deficit, they continue the upward pressures on interest rates. To the extent they are paid for directly by taxpayers, funds are diverted from private consumption and investment. In either case, the net effect is to redirect funds from private markets to the agricultural sector of the economy with some benefit sharing by foreign consumers.

CONSEQUENCES OF DIRECT EXPORT CREDIT LOANS

This section examines the consequences of a $1 billion appropriation to fund the AECRF in fiscal year 1983 and its use over the 1983-1986 period. The key assumptions underlying the analysis are:

- Three-year (36-month) loans of $1 billion are made early in fiscal year 1983 with interest rates set at CCC's cost of borrowing from the Treasury, and loans in subsequent years are limited to principal and interest repayments from previous years' loans; and
- Export credits result in $30 million of additional exports for every $100 million of loans.

The mix of commodities financed by the AECRF would be determined by administrative discretion. Three alternative commodity mixes are analyzed: (1) the current mix--30 percent each of corn and wheat, 15 percent of soybeans, and 25 percent of other commodities; (2) all wheat; and (3) all corn. The current mix is roughly the commodity allocation under the loan guarantee program now in place. Table 1 provides estimates of the amount of each commodity that would be financed under each alternative.

TABLE 1. EXPORTS UNDER ALTERNATIVE MIXES OF COMMODITIES FINANCED BY DIRECT EXPORT CREDIT LOANS IN 1983

Commodity Mix	Exports a/ (In millions of bushels)		Change in U.S. Exports of Each Commodity (In percent)
	Financed	Additional	
Current Mix			
Wheat	64	19	1.1
Corn	100	30	1.4
Soybeans	22	7	0.8
All Wheat	210	66	3.7
All Corn	330	99	4.7

a/ During 1984-1986, annual exports would average approximately one-half of these quantities.

Farm Prices and Cash Receipts

Wheat and corn prices would increase 1 to 2 percent if the current mix was retained, the result of a 1 to 2 percent increase in exports of these commodities. Wheat prices would increase 7 percent under an all-wheat program, where exports would rise about 4 percent; and corn prices would increase about 2 percent from the nearly 5 percent increase in exports under an all-corn program.

Averaged over the 1983-1986 period, annual farm cash receipts would be about $345 million higher under the current mix; $765 million more under an all-wheat program; and $360 million more under an all-corn program. These increases would add less than 1 percent to total annual cash receipts from farming. Table 2 presents these data for the 1983-1986 fiscal years.

TABLE 2. CHANGES IN FARM PRICES, CASH RECEIPTS, AND AGRICULTURAL TRADE SURPLUS FROM ONE BILLION DOLLARS OF EXPORT CREDIT LOANS IN 1983, BY COMMODITY MIX

Commodity Mix	Fiscal Year			
	1983	1984	1985	1986
Farm Prices (dollars per bushel)				
Current Mix				
Corn	0.02	0.01	0.01	0.01
Wheat	0.07	0.06	0.08	0.09
All Wheat	0.27	0.24	0.29	0.34
All Corn	0.05	0.04	0.05	0.06
Cash Receipts (millions of dollars)				
Current Mix	350	300	350	375
All Wheat	735	650	785	890
All Corn	360	290	360	430
Agricultural Trade Surplus a/ (millions of dollars)	300	145	200	275

a/ Same under each commodity mix.

Agricultural Trade

The net increase in agricultural exports and the agricultural trade surplus, everything else constant, would be the same under each commodity mix— $300 million in 1983 and a yearly average of $200 million thereafter. This is shown in Table 2. These increases would add less than 1 percent to total U.S. agricultural exports. In turn, this increase in agricultural exports implies increases in associated economic activity of about $1 billion during the 1983-1986 period, equivalent to about 35,000 jobs. However, these increases in economic activity and employment might be offset elsewhere in the economy to the extent that taxes or the federal budget deficit were increased.

Budget Outlays

Direct export credit loans would affect agriculture outlays (budget function 350) not only through the AECRF, but also through price support and related programs. In addition, to the extent that the $1 billion of loans in 1983 increased the federal deficit, this would put upward pressure on interest rates and the rate of general price inflation which would further increase federal expenditures.

Agricultural Export Credit Revolving Fund. Under each commodity mix, outlays of $1.15 billion would be incurred in 1983—$1.0 billion in loans plus interest of $0.15 billion. After 1983, annual outlays would be $150 million, reflecting the interest costs of the initial $1 billion of loans. These outlays assume that: three-year loans would be made with annual repayments of one-third of the principal plus interest on outstanding loans; and new loans would be restricted to the funds made available through principal and interest repayments. Restricting loans to principal and interest repayments would result in significantly lower loan levels in 1984. Thereafter the ability of the AECRF to make new loans would gradually increase through 1986. Additional outlays would be required to increase the 1984-1986 loans above the levels shown in Table 3. This table provides estimates of AECRF outlays by fiscal year.

Price Support and Related Programs. Price support outlays would be reduced under each commodity mix as shown in Table 4. This is because increased exports would raise farm prices, thus reducing wheat and feed grain loans, wheat deficiency payments, and grain reserve storage payments.

As compared to the current mix, a greater reduction in price support outlays would result from the concentration of export credit loans in either wheat or corn. In 1983, the largest outlay reduction, $310 million, would

TABLE 3. AGRICULTURAL EXPORT CREDIT REVOLVING FUND OUTLAYS (In millions of dollars)

Item	Fiscal Year 1983	1984	1985	1986 a/
Loans Made b/	1,000	483	667	914
Loans Repaid c/	---	483	667	914
Net Loan Outlays	1,000	---	---	---
Interest Expense d/	150	150	150	150
Net Outlays	1,150	150	150	150
Loans Outstanding	1,000	1,150	1,323	1,521

a/ Assumes AECRF is a four-year program and that no new loans are made after 1986. Principal and interest repayments from loans outstanding at the end of 1986 are completed in 1989.

b/ Initial loans of $1 billion in 1983 with loans in 1984-1986 equivalent to principal and interest repayments from previous years' loans. Three-year loans with annual repayments of one-third of principal plus interest on outstanding loans.

c/ Includes interest payments.

d/ CCC's current cost of borrowing from Treasury times the initial $1 billion of loans.

occur under an all-wheat program compared to $142 million under the current mix.

Net Outlays. Under each option, increases in AECRF outlays would exceed reductions in price support outlays. Thus, in 1983, the net outlay impact of $1 billion in direct export credit loans (plus interest expense) would range from $840 million under an all-wheat program to about $1 billion under the current mix (Table 4). In the outyears, the smallest increase in net outlays would occur under the all-corn program.

TABLE 4. CHANGE IN OUTLAYS FROM ONE BILLION DOLLARS OF EXPORT CREDIT LOANS IN 1983 BY COMMODITY MIX (In millions of dollars)

Commodity Mix	Fiscal Year 1983	1984	1985	1986
Current Mix				
Agricultural Export Credit Revolving Fund a/	1,150	150	150	150
Price support and related programs	-142	-9	-23	-27
Net b/	1,008	141	127	123
All Wheat				
Price support and related programs	-310	35 c/	-31	-41
Net b/	840	185	119	109
All Corn				
Price support and related programs	-198	-84	-76	-88
Net b/	952	66	74	62

a/ Outlays are the same under each option. In 1983, budget authority would be $1 billion.

b/ AECRF outlays less changes in price support outlays.

c/ Net increase results from larger loan repayments in 1983, reducing repayments in 1984.

Conclusions

One billion dollars in direct export credit loans in fiscal year 1983 and an average of $690 million annually during 1984-1986 would have a positive effect on agricultural exports, farm prices and cash receipts, and economic activity. But this would increase net outlays by at least $840 million in

1983, or $2.80 per $1 of additional exports. After 1983, direct export credit loans would increase net annual outlays by $70 to $140 million, or by $0.30 to $0.70 for each $1.00 of additional exports.

Funding the AECRF in 1983, everything else constant, would increase federal borrowing and the deficit during 1983-1986. Although the impact of incremental increases in the deficit cannot be estimated, an increase in the deficit would certainly impose costs on the domestic economy. Direct federal borrowing to finance the deficit increases competition for funds and drives up interest rates, thereby crowding out private-sector investment. Ultimately, the reduction in private investment hurts productivity growth and worsens inflation. Furthermore, in the face of chronic budget deficits, these adverse effects are compounded by the further increases in outlays for interest on the federal debt caused by higher interest rates. Alternatively, the outlays for the AECRF could be paid for through higher taxes.

In sum, direct export credit loans can increase net U.S. agricultural exports, but the additionality is likely to be small. Thus, the economic benefits conferred on the farm sector would have to be weighed against the adverse macroeconomic effects of the outlays required for initial funding of the AECRF as well as for future outlays.